**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1. (Currently amended) A micro TPV generator comprising:

a combustion chamber comprising an internal chamber where combustion occurs, the internal chamber having ~~with~~ an internal expansion step configured to generate a significantly even temperature distribution on an outer wall of the combustion chamber,

an emitter engaged around or at least in thermal connection to said chamber, and a photovoltaic cell in proximity to said emitter and configured to generate an electrical current depending on photons incident thereon.

2. (Previously presented) A micro TPV generator as claimed in claim 1 wherein said chamber comprises a platinum catalyst coating on an inner wall thereof.

3. (Original) A micro TPV generator as claimed in claim 2 wherein said outer wall is substantially cylindrical.

4. (Previously presented) A micro TPV generator as claimed in claim 3 wherein said expansion step is a backwards facing step.

5. (Original) A micro TPV generator as claimed in claim 4 wherein said emitter has an emission characteristic matched to the bandgap characteristic of said cell.

6. (Original) A micro TPV generator as claimed in claim 5 wherein said emitter formed of Co-/Ni-doped MgO ribbon or tape.

7. (Original) A micro TPV generator as claimed in claim 5 wherein said emitter formed of SiC.

8. (Original) A micro TPV generator as claimed in claim 5 further comprising a filter between said emitter and said cell configured to pass photons above a threshold and reflect photons under said threshold.

9. (Original) A micro TPV generator as claimed in claim 8 wherein said filter comprises 9 layers of Si-SiO2 bonded between a glass slide and said cell.

10. (Previously presented) A micro TPV generator as claimed in claim 9 wherein said cell is formed from a GaSb based semiconductor.

11. (Previously presented) A micro TPV generator as claimed in claim 1 said chamber having an internal diameter less than 1 mm for hydrogen fuel at compressed pressure.

12. (Previously presented) A micro TPV generator as claimed in claim 1 said chamber having an internal diameter less than 3 mm for propane at atmospheric pressure.

13. (Previously presented) A micro TPV generator as claimed in claim 1 wherein said internal chamber comprises a first section and a second section, wherein the cross-sectional width of said first section is greater than the cross-sectional width of said second section to form said expansion step.

14. (Previously presented) A micro TPV generator as claimed in claim 1 wherein said internal chamber comprises a first tubular section and a second tubular section, wherein said first tubular section has a diameter that is greater than the diameter of said second tubular section to form said expansion step.

15. (Previously presented) A micro TPV generator as claimed in claim 1 wherein said photovoltaic cell is fabricated from one or more of:

InGaSb,

InGaAsSb.

16. (Canceled).

17. (Currently amended) A micro TPV generator as claimed in claim 5 ~~16~~ wherein said combustion chamber comprises SiC.

18. (Currently amended) A micro TPV generator comprising:

a combustion chamber comprising an internal chamber where combustion occurs, the internal chamber having ~~with~~ an internal expansion step configured to generate a significantly even temperature distribution on an outer wall of the combustion chamber, an emitter formed as part of said chamber wall, and a photovoltaic cell in proximity to said emitter and configured to generate an electrical current depending on photons incident thereon.

19. (New) A micro TPV generator as claimed in claim 1 comprising a hexagonal cell arrangement.